Tim Hollkamp Toyota Industrial Equipment Mfg., Inc. P.O. 2487 Columbus, IN 47202-2487

Re: **005-11975** 

Third Administrative Amendment to

Part 70 005-7545-00040

Dear Mr. Hollkamp:

Toyota Industrial Equipment Manufacturing, Inc. was issued a permit on April 14, 1999, for a stationary industrial truck manufacturing source. The first Administrative Amendment was issued on July 21, 1999, and the second Administrative Amendment was issued on September 7, 1999. A letter requesting a change was received on March 7, 2000. The changes are as follows with deleted language as strikeouts and new language **bolded.** Pursuant to the provisions of 326 IAC 2-7-11, the permit is hereby administratively amended as follows:

The three (3) shot blast units at this source use filter banks, not baghouses, and do not exhaust to the outside atmosphere. The use of the word baghouse is incorrect in Section D.2. Toyota Industrial Equipment Manufacturing, Inc. requested clarification to the compliance monitoring Conditions D.2.5 and D.4.5 in this permit. The facility descriptions in Section A.2 and the Facility Description Box in Section D.2 have been revised as follows:

- (f) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a baghouse dust collector (C010) and exiting into the building, capacity: 132,000 pounds of steel shot per hour.
- (g) One (1) small parts shot blast cabinet, identified as U010, constructed in 1992, exhausting to a baghouse dust collector (C009) and exiting into the building, capacity: 60,000 pounds of shot per hour.

Conditions D.2.5 and D.4.5 have been revised as follows:

# D.2.5 Visible Emissions Notations

- (a) Daily visible emission notations of the <del>baghouse</del> stacks exhausts shot blast units at the point of exhaust shall be performed during normal daylight operations when exhausting to the outside atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.4.5 Visible Emissions Notations

- (a) Daily visible emission notations of the shot blast unit at the point of exhaust shall be performed during normal daylight operations when exhausting to the **outside** atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

In addition, Conditions D.2.4, D.2.6, D.2.7 and D.2.8 are revised as follows:

#### D.2.4 Particulate Matter (PM)

- (a) The baghouse dust collector (C009) shall be in operation at all times when the one (1) large parts shot blast cabinet is in operation.
- (b) The baghouse dust collector (C010) shall be in operation at all times when the one (1) small parts shot blast cabinet is in operation.

#### D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses dust collectors (C009 and C010) used in conjunction with the shot blasting processes, at least once weekly when the shot blasting is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain trouble-shooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

# D.2.7 Baghouse **Dust Collector** Inspections

An inspection shall be performed each calendar quarter of all bags filters controlling the shot blasting operations when venting to the atmosphere. A baghouse dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

# D.2.8 Broken Bag or Failed Bag Dust Collector Failure Detection

In the event that bag a dust collector failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses dust collectors, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

Conditions D.2.9 and D.4.9 are also revised as follows:

#### D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the baghouse shot blast stacks exhaust on days when the shot blasters are exhausting to the outside atmosphere.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain the following:
  - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).

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- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.4.9 Record Keeping Requirements

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the mechanical blasting booth at the point of exhaust **on days** when the blasting booth is exhausting to the outside atmosphere.
- (b) To document compliance with Condition D.4.7, the Permittee shall maintain the following:
  - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.4.6 and D.4.8, the Permittee shall maintain records of the results of the inspections, parts replaced and corrective actions taken if necessary.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

In addition the requested amendment, Toyota Industrial Equipment Manufacturing, Inc. is installing a four-stage iron phosphate washer at the source. The washer has a potential usage rate of 1,971 gallons per year of alkaline materials. Stages one and three are heated with a hot water generator. The generator operates on natural gas and has a maximum heat input capacity of 0.850 million British thermal units per hour. This facility is an insignificant activity pursuant to 326 IAC 2-7-1(21)(B), "For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers ( $PM_{10}$ ), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day." Pursuant to 326 IAC 2-7-1(21)(K), this change does not constitute a modification and the source could update its list of insignificant activities as part of its annual compliance certification. However, since other amendments are requested at this time, item (e) of the insignificant activities list in Section A.3 and the Facility Description Box in Section D.3 of the permit are revised as follows:

- (e) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
  - (1) One (1) counter-weight sanding booth, identified as I003, controlled by a dry filter, and exhausting to stack S003c.
  - One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
  - (3) Ninety-nine (99) metal inert gas (MIG) welding stations.
  - (4) Two (2) powder coating booths, identified as I012, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters in series and the filters exhaust to the atmosphere.
  - (5) Seven (7) metal inert gas (MIG) welding stations in process B300.
  - (6) Sixteen (16) metal inert gas (MIG) welding stations.
  - (7) One (1) four-stage iron phosphate washer.

Condition D.3.3 is revised as follows:

#### D.3.3 Particulate Matter (PM) [326 IAC 6-3]

- (a) The particulate matter (PM) from the one (1) counter-weight sanding booth, identified as 1003, one (1) powder coat line, identified as 1011, and ninety-nine (99) welding stations shall each not exceed 0.551 pounds per hour for a process weight rate of less than 100 pounds per hour.
- (b) The particulate matter (PM) from the insignificant activities of brazing, cutting, soldering, remaining welding, grinding and machining, **and iron phosphate washing** shall be limited to the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

(c) Pursuant to Exempt Construction and Operation Status, CP 005-10221-00040, the powder coating booths and the washer/treatment process shall comply with 326 IAC 6-3-2(c) using the following equation:

 $E = 4.10P^{0.67}$  where: E = rate of emission in pounds per hour,

P = process weight in tons per hour, if

P is equal to or less than 60,000 lbs/hr (30 tons/hr).

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact CarrieAnn Ortolani, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Management

# CAO/MES Attachments

cc: File - Bartholomew County U.S. EPA, Region V

Bartholomew County Health Department
Air Compliance Section Inspector - D. J. Knotts
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR MANAGEMENT

# Toyota Industrial Equipment Manufacturing, Inc. 5555 Inwood Drive Columbus, Indiana 47202

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 005-7545-00040		
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:	

First Administrative Amendment 005-10989-00040, issued on July 21, 1999 Second Administrative Amendment 005-11174-00040, issued on September 7, 1999

Third Administrative Amendment: 005-11975-00040	Pages Affected: 4, 6, 7, 36, 37, 38, 39, 40, 42 and 44
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

# D.1.11 Reporting Requirements

# D.2 FACILITY OPERATION CONDITIONS - Two (2) shot blast cabinets

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]
- D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

# **Compliance Determination Requirements**

- D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.2.4 Particulate Matter (PM)

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.2.5 Visible Emissions Notations
- D.2.6 Parametric Monitoring
- D.2.7 Dust Collector Inspections
- D.2.8 Dust Collector Failure Detection

# Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

# D.3 FACILITY OPERATION CONDITIONS - Insignificant Activities

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]
- D.3.2 Particulate Matter (PM) [326 IAC 6-2-4]
- D.3.3 Particulate Matter (PM) [326 IAC 6-3]

#### **Compliance Determination Requirement**

- D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.3.5 Particulate Matter (PM)

# D.4 FACILITY OPERATION CONDITIONS - One (1) shot blast unit

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]
- D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

#### **Compliance Determination Requirements**

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.4.4 Particulate Matter (PM)
- D.4.5 Visible Emissions Notations
- D.4.6 Dust Collector Inspections
- D.4.7 Parametric Monitoring
- D.4.8 Failure Detection

# Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.9 Record Keeping Requirements

Toyota Industrial Equipment Manufacturing, Inc.

Columbus, Indiana Third Administrative Amendment 005-11975-00040 Permit Reviewer:MES Modified by: MES

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#### **SECTION A SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] A.1

The Permittee owns and operates a stationary industrial truck manufacturing source.

Responsible Official: R.J. Reynolds

Source Address: 5555 Inwood Drive, Columbus, Indiana 47202

Mailing Address: 5555 Inwood Drive, P.O. Box 2487, Columbus, Indiana 47202-2487

SIC Code: 3537

County Location: Bartholomew

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under PSD Rules;

Major Source, Section 112 of the Clean Air Act

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- One (1) primer coat paint booth, identified as U001, constructed in 1989, equipped with air-(a) assisted airless spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S001a and S001b, capacity: 12 trucks per hour.
- (b) One (1) top coat paint booth, identified as U002, constructed in 1989, equipped with airassisted airless spray guns and a horizontal water curtain with a downdraft water-floor followed by a demister as overspray control, exhausting to stacks S002a and S002b, capacity: 12 trucks per hour.
- (c) One (1) counter-weight paint booth, identified as U003, constructed in 1993, equipped with air-assisted airless spray guns and a water curtain followed by a baffle demister as overspray control, exhausting to stacks S003a and S003b, capacity: 12 units per hour.
- One (1) touch-up paint booth, identified as U004, constructed in 1989, equipped with air-(d) assisted airless spray guns and dry filters as overspray control, exhausting to stack S004, capacity: 12 trucks per hour.
- (e) One (1) D-500 paint booth, identified as U005, constructed in 1996, equipped with airassisted airless spray guns and dry filters as overspray control, exhausting to stack S005a, capacity: 3 trucks per hour.
- (f) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a dust collector (C010) and exiting into the building, capacity: 132,000 pounds of steel shot per hour.

- (g) One (1) small parts shot blast cabinet, identified as U010, constructed in 1992, exhausting to a dust collector (C009) and exiting into the building, capacity: 60,000 pounds of shot per hour.
- (h) One (1) steel shot blast unit, with a maximum blast rate of 115,500 pounds per hour, controlled by a dust collector, designated as U011, and exhausts inside the building.

# A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Forty-three (43) emission units with a total heat input capacity of 29.33 million British thermal units per hour. Includes, two (2) boilers rated at 0.75 million British thermal units per hour.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons, and one (1) maintenance parts cleaner, using mineral spirits, with a capacity of 16 gallons.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (d) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
  - (1) One (1) counter-weight sanding booth, identified as I003, controlled by a dry filter, and exhausting to stack S003c.
  - One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
  - (3) Ninety-nine (99) metal inert gas (MIG) welding stations.
  - (4) Two (2) powder coating booths, identified as I012, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters in series and the filters exhaust to the atmosphere.
  - (5) Seven (7) metal inert gas (MIG) welding stations in process B300.
  - (6) Sixteen (16) metal inert gas (MIG) welding stations.
  - (7) One (1) four-stage iron phosphate washer.

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#### **SECTION D.2**

# **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)]

- (f) One (1) large parts shot blast cabinet, identified as U009, constructed in 1989, exhausting to a dust collector (C010) and exiting into the building, capacity: 132,000 pounds of steel shot per hour.
- (g) One (1) small parts shot blast cabinet, identified as U010, constructed in 1992, exhausting to a dust collector (C009) and exiting into the building, capacity: 60,000 pounds of shot per hour.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(c) (Process Operations), the allowable PM emission rate from the one (1) large parts shot blast cabinet shall not exceed 47.2 pounds per hour when operating at a process weight rate of 132,000 pounds per hour and the one (1) small parts shot blast cabinet shall not exceed 40.0 pounds per hour when operating at a process weight rate of 60,000 pounds per hour.

The pounds per hour limitation was calculated with the following equations:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

 $55.0P^{0.11} - 40$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

# D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

# **Compliance Determination Requirements**

# D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.2.4 Particulate Matter (PM)

- (a) The dust collector (C009) shall be in operation at all times when the one (1) large parts shot blast cabinet is in operation.
- (b) The dust collector (C010) shall be in operation at all times when the one (1) small parts shot

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blast cabinet is in operation.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.2.5 Visible Emissions Notations

- (a) Daily visible emission notations of the shot blast units at the point of exhaust shall be performed during normal daylight operations when exhausting to the outside atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collectors (C009 and C010) used in conjunction with the shot blasting processes, at least once weekly when the shot blasting is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

#### D.2.7 Dust Collector Inspections

An inspection shall be performed each calendar quarter of all filters controlling the shot blasting operations when venting to the atmosphere. A dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.2.8 Dust Collector Failure Detection

In the event that a dust collector failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the continue only if the event qualifies as an emergency and the Permittee satisfies the

Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment dust collectors, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

# Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.2.9 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the shot blast stacks exhaust on days when the shot blasters are exhausting to the outside atmosphere.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain the following:
  - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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#### **SECTION D.3**

# **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Forty-three (43) emission units with a total heat input capacity of 29.33 million British thermal units per hour. Includes, two (2) boilers rated at 0.75 million British thermal units per hour.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons, and one (1) maintenance parts cleaner, using mineral spirits, with a capacity of 16 gallons.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (d) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
  - (1) One (1) counter-weight sanding booth, identified as I003, controlled by a dry filter, and exhausting to stack S003c.
  - One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
  - (3) Ninety-nine (99) metal inert gas (MIG) welding stations.
  - (4) Two (2) powder coating booths, identified as I012, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters in series and the filters exhaust to the atmosphere.
  - (5) Seven (7) metal inert gas (MIG) welding stations in process B300.
  - (6) Sixteen (16) metal inert gas (MIG) welding stations.
  - (7) One (1) four-stage iron phosphate washer.

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to PC (03) 1733, issued on March 3, 1989, the one (1) maintenance parts washer using mineral spirits with a capacity of sixteen (16) gallons is subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations). Pursuant to this rule, the owner or operator of the one (1) parts washer shall:

(a) Equip the cleaner with a cover;

- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### D.3.2 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating, the PM emissions from the two (2) 0.75 MMBtu per hour heat input boilers shall be limited to 0.6 pounds per MMBtu heat input.

This limitation is based on the following equation:

 $Pt = 1.09/Q^{0.26}$ 

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

# D.3.3 Particulate Matter (PM) [326 IAC 6-3]

- (a) The particulate matter (PM) from the one (1) counter-weight sanding booth, identified as I003, one (1) powder coat line, identified as I011, and ninety-nine (99) welding stations shall each not exceed 0.551 pounds per hour for a process weight rate of less than 100 pounds per hour.
- (b) The particulate matter (PM) from the insignificant activities of brazing, cutting, soldering, remaining welding, grinding and machining, and iron phosphate washing shall be limited to the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

(c) Pursuant to Exempt Construction and Operation Status, CP 005-10221-00040, the powder coating booths and the washer/treatment process shall comply with 326 IAC 6-3-2(c) using the following equation:

Permit Reviewer:MES

#### Third Administrative Amendment 005-10989-00040 Modified by: MES

#### **SECTION D.4**

#### **FACILITY CONDITIONS**

# Facility Description [326 IAC 2-7-5(15)]

(h) One (1) steel shot blast unit, with a maximum blast rate of 115, 500 pounds per hour, controlled by a dust collector, designated as U011, and exhausts inside the building.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to CP005-10284-00040 and 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the shot blast unit shall not exceed 45.9 pounds per hour when operating at a process weight rate of 115,500 pounds per hour. The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 55.0 P^{0.11} - 40$  where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour.

# D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

#### **Compliance Determination Requirement**

# D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# **Compliance Monitoring Requirements**

# D.4.4 Particulate Matter (PM)

Pursuant to CP005-10284-00040, the dust collector for PM control shall be in operation at all times when the shot blast unit is in operation.

#### D.4.5 Visible Emissions Notations

- (a) Daily visible emission notations of the shot blast unit at the point of exhaust shall be performed during normal daylight operations when exhausting to the outside atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

Third Administrative Amendment 005-11975-00040 Modified by: MES

# Record Keeping Requirements [326 IAC 2-1-3]

# D.4.9 Record Keeping Requirements

Permit Reviewer:MES

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the mechanical blasting booth at the point of exhaust on days when the blasting booth is exhausting to the outside atmosphere.
- (b) To document compliance with Condition D.4.7, the Permittee shall maintain the following:
  - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.4.6 and D.4.8, the Permittee shall maintain records of the results of the inspections, parts replaced and corrective actions taken if necessary.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.